

Organic Agriculture and the Problems in Rural Development

Экологическое земледелие и проблемы сельского развития

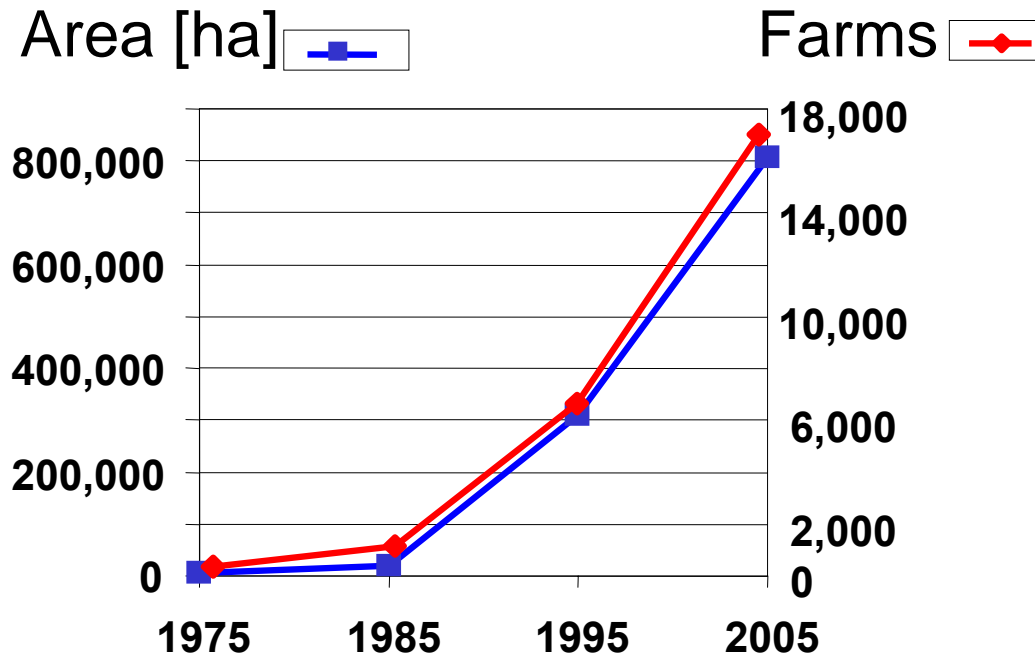
Prof. Dr. H. Vogtmann,
**President of the
Federal Agency
for Nature Conservation
Germany**



Tbilisi, January 2007

Organic Agriculture in Germany

Экологическое земледелие в Германии



Source: Federal Ministry of Food, Agriculture and Consumer Protection

Academic basis

1981 → 1 Professorship
2006 → 33 Professorships

Source: Foundation Ecology & Agriculture (SÖL)



Global Responsibility

Глобальная ответственность

Rio, 1992:
Convention on Biodiversity

Conservation
of biological
diversity

Sustainable
use of its
components

Fair and
equitable
sharing of
the benefits

Equal aims

Principle of „Health“ Принцип ”здоровья”

Organic Agriculture should sustain and enhance the health of soil, plant, animal, human and planet as one and indivisible.





Organic Farming

- ➡ **Contributes to preservation of biodiversity**
- ➡ **Protects ground water from nitrate and pesticide pollution**
- ➡ **Produces healthy food**
- ➡ **Ensures jobs in agriculture, food processing and marketing**



Organic Farming

- ➡ **Strives for a largely closed farm cycle**
- ➡ **Preserves soil fertility**
- ➡ **Preserves air, soil and energy resources**
- ➡ **Provides for adequate animal housing**

Multifunctional, Naturesound Farming

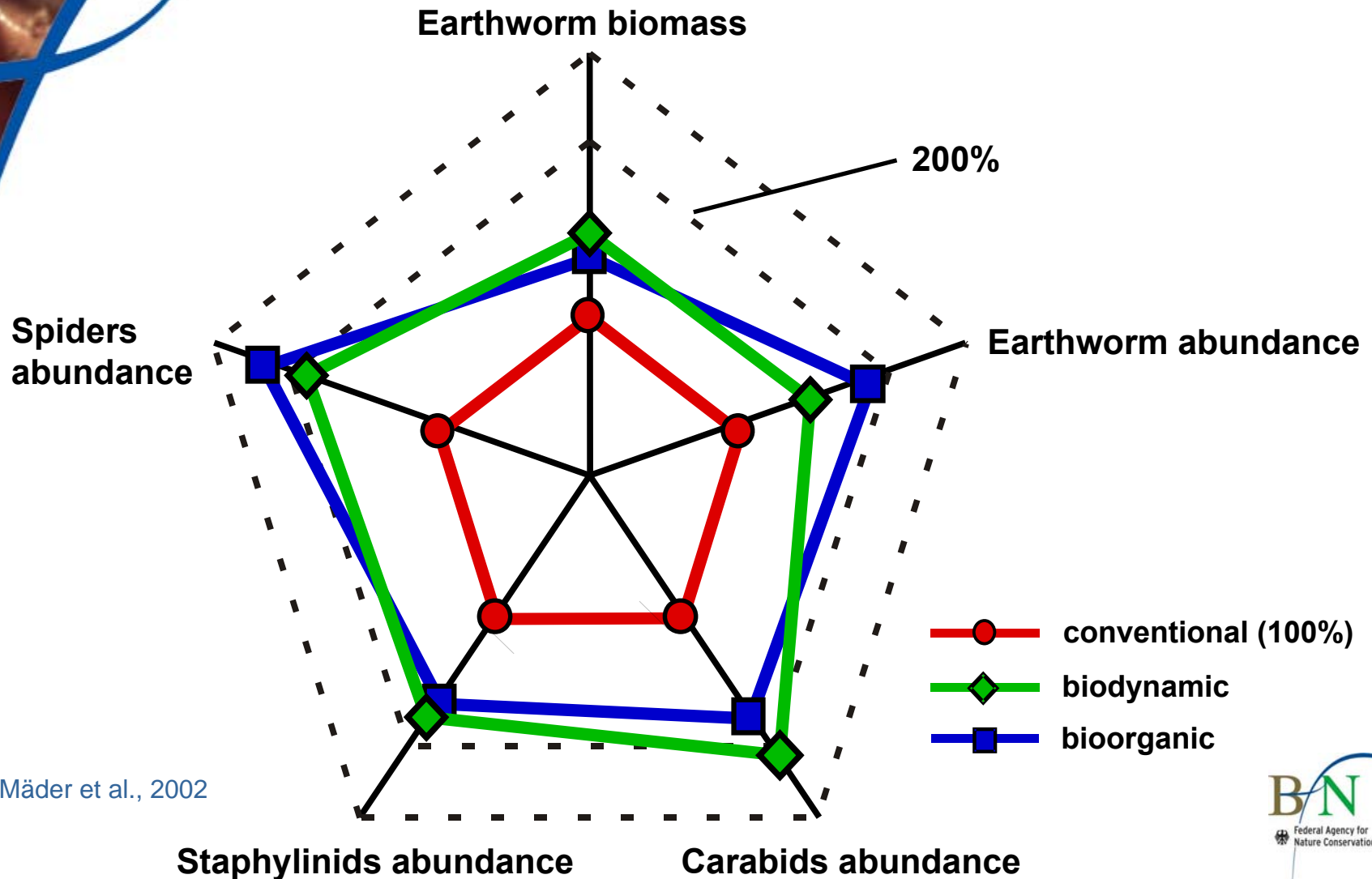
Products

- Food
- Water
- Energy
- Cultural Landscape
- Biodiversity
- Recreation
- Education



Biodiversity in Soil

Биоразнообразие в почве

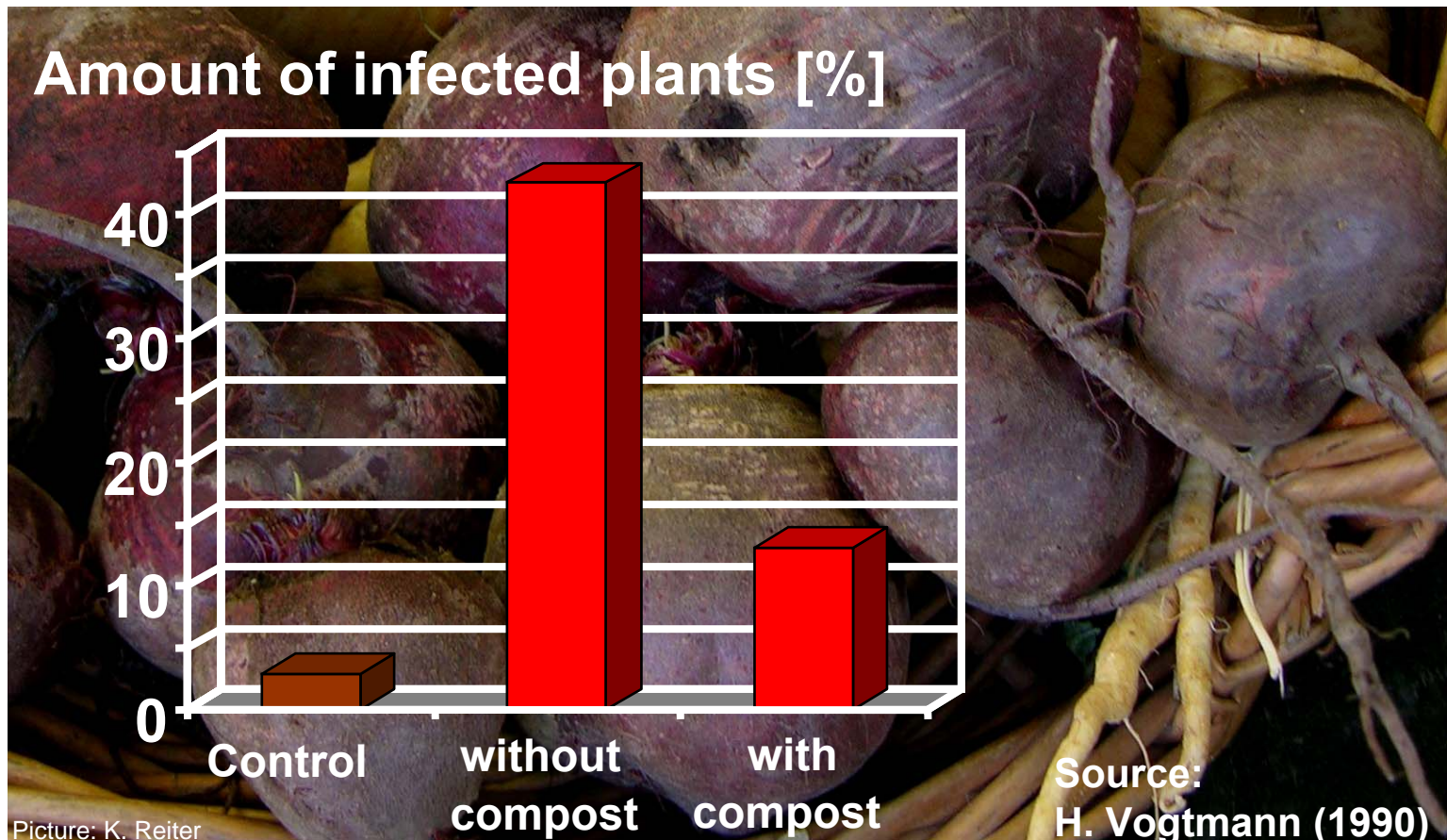


Source: Mäder et al., 2002

Health of Plants Здоровье растений

Phytosanitary effects of compost

- fungal infection (*Phytium ultimum*) of beetroots -



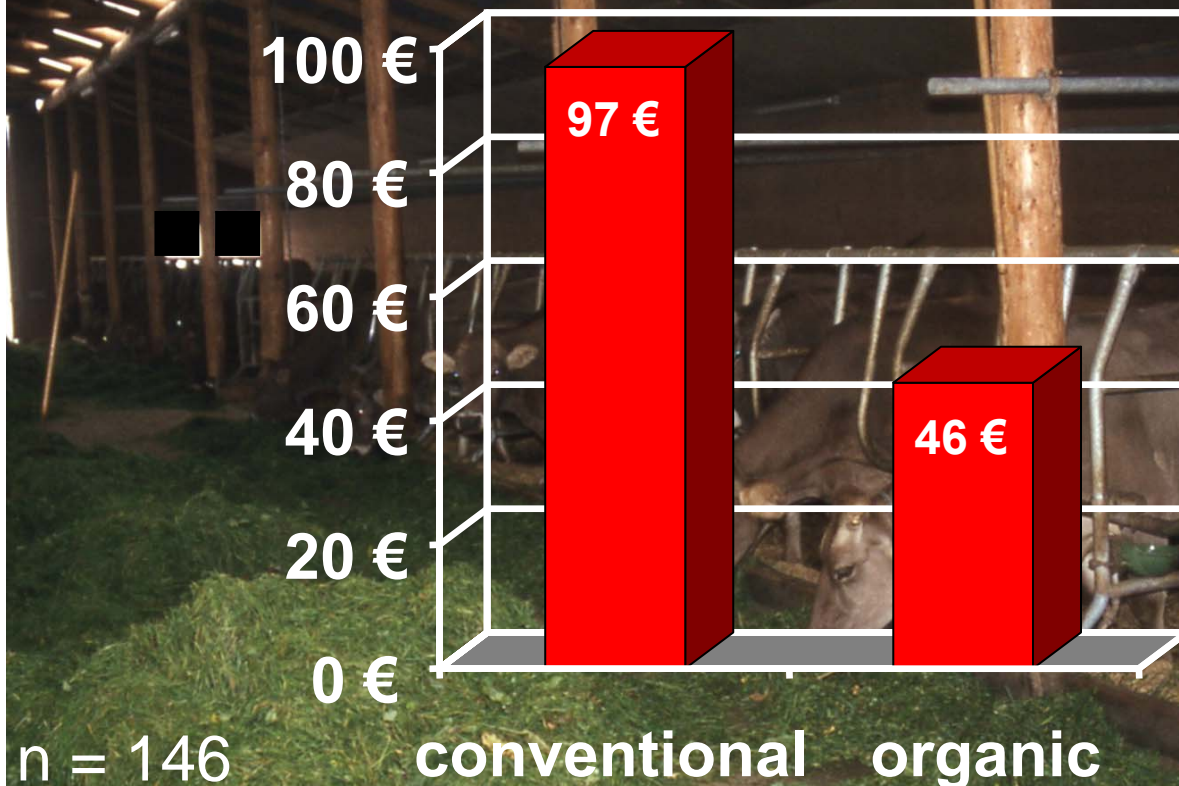
Health of Animals

Здоровье зверей

Source:

H. Vogtmann (1996)

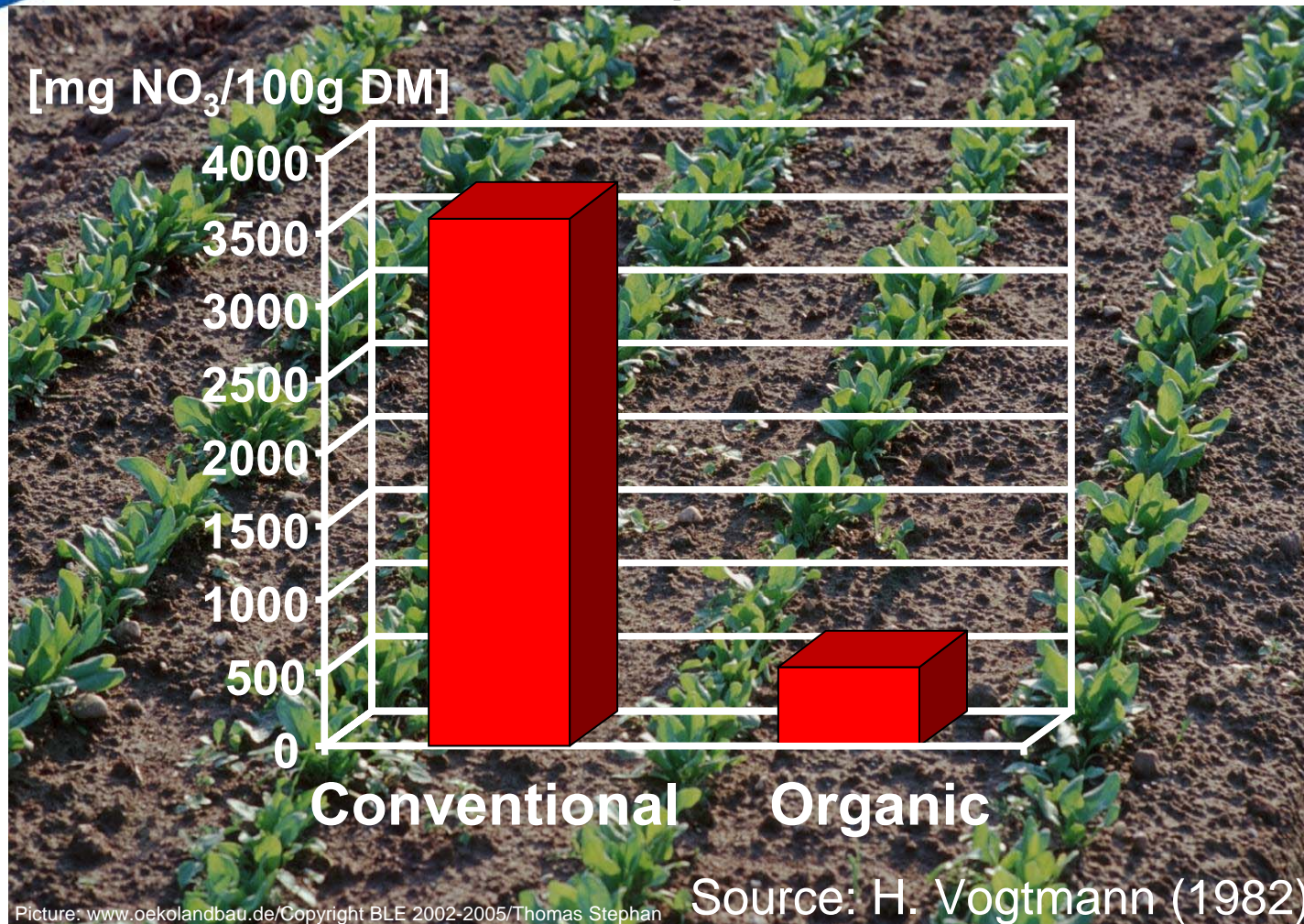
veterinary costs per livestock unit



Health of Human Being

Здоровье человека

Spinach



Picture: www.oekolandbau.de/Copyright BLE 2002-2005/Thomas Stephan

Source: H. Vogtmann (1982)

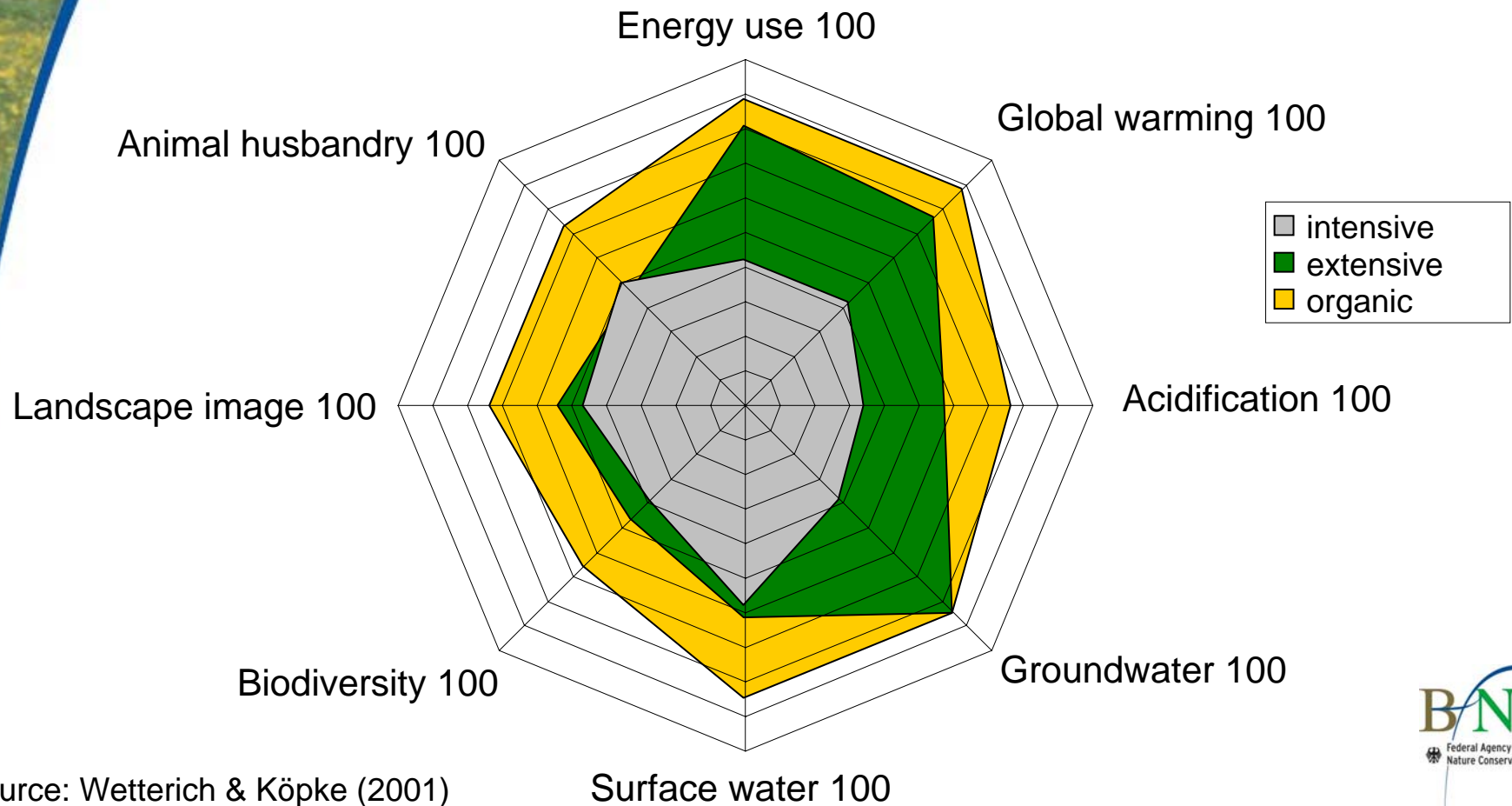
Pesticide residues in food

Conventional		Organic		
	total	fruits	vegetables	total
Number of samples	856	30	143	173
Without residues (%)	60.9	100	96.5	97.1
With residues				
< legal max. (%)	32.9	0	3.5	2.9
> legal max. (%)	6.2	0	0	0

according to SCHÜPPBACH (1986)

Comparison of Selected Impact Categories of Different Grassland Management Systems

Сравнение избранных категорий влияния на различные системы менеджмента лугами



Source: Wetterich & Köpke (2001)



Added Value in Rural Regions

Повышение ценности сельского региона

- Nature conservation and open landscape -

	1997	1998	1999	2001
Production	- millions kg of milk -			
milk organic	2.0	4.0	10.0	14.0
milk conv.	7.0	6.0	7.0	7.0
Added value	- million € -			
milk organic	0.5	1.0	2.6	4.8
milk conv.	1.1	0.9	1.1	1.0
Organic-farmers	0.1	0.2	0.5	0.8
Total	1.7	2.1	4.2	6.6

Upländer Dairy (Usseln, Hesse)

Added value by protected areas

Повышение стоимости посредством охраняемых территорий

National park "Bayerischer Wald "

touristic earnings in 1999:

116 m €

that accounts for

4540 jobs



Nature park "Altmühltal "

touristic net turnover in 2004:

10.3 m €

that accounts for

483 jobs

Conclusion

Вывод



Ecological health is economic welfare

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Up from **February 1st 2007** on
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Busy *for* Nature



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Nature Conservation

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